



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,031	02/23/2004	Christopher Martin	200209039-2	3785

22879 7590 03/21/2007

HEWLETT PACKARD COMPANY  
P O BOX 272400, 3404 E. HARMONY ROAD  
INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER
----------

HASSAN, AURANGZEB

ART UNIT	PAPER NUMBER
----------	--------------

2182

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/21/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/783,031

Applicant(s)

MARTIN, CHRISTOPHER

Examiner

Aurangzeb Hassan

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 22-27 and 29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-27 and 29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 22, 25 – 27 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Aoki (US Patent Number 6,069,763).
3. As per claim 22, 25, 26, 27 and 29, Aoki teaches a tape drive unit comprising: a data compression engine (rotary control mechanism 5, figure 1A) capable of applying compression to an incoming data stream (data compression means, column 5, lines 47 – 67) and outputting a compressed data stream; a buffer memory capable of storing said compressed data stream (buffer 1, figure 1A, column 3, lines 46 – 55); a monitoring element capable of monitoring a data occupancy level of said buffer memory (tape residual amount sensing mechanism 2, column 4, lines 18 – 25); and a control element capable of enabling or disabling said data compression engine (on/off control element from the memory, column 2, lines 9 – 15); wherein said control element is operable to disable said data compression engine in response to said data occupancy level of said buffer memory being below a predetermined level (memory is used as a basis for the off

Art Unit: 2182

position, column 1 lines 59 – 67, column 2, lines 1 – 15).

The Examiner notes that the compression engine and buffer memory of Aoki are “capable” of accomplishing various data handling techniques and no teachings of Aoki stipulate that the “capable” steps of the claim limitations cannot be accomplished by the prior art.

4. Claims 22, 25 – 27 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Applicant's Admitted Prior Art hereinafter “AAPA”.

5. As per claim 22, 25, 26, 27 and 29, AAPA teaches a tape drive unit comprising: a data compression engine capable of applying compression to an incoming data stream and outputting a compressed data stream; a buffer memory capable of storing said compressed data stream; a monitoring element capable of monitoring a data occupancy level of said buffer memory; and a control element capable of enabling or disabling said data compression engine; wherein said control element is operable to disable said data compression engine in response to said data occupancy level of said buffer memory being below a predetermined level (pages 4 – 6).

The Examiner notes paragraphs [0016 – 0018] where the Applicant summarizes why it is known to compress incoming data received from a host computer device prior to

writing the data to a tape data storage medium. Furthermore the Applicant elaborates with two motivations to utilize such a mechanism.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki in view of Langdon Jr. et al. (US Patent Number 5,097,261 hereinafter "Langdon").

8. As per claim 23, Aoki teaches a tape drive unit comprising: a tape wherein said tape is operable to continue streaming of said tape, whilst said data compression engine is in an enabled mode, and whilst said compression engine is in a disabled mode (controlling the data compression engine with on/off enable/disable functionality, column 2, lines 9 – 15).

Aoki does not disclose a mechanism for transporting data past a transducer.

Langdon analogously teaches a tape transport mechanism for transporting a tape data storage medium past a transducer (column 5, lines 51 – 55); wherein said

Art Unit: 2182

tape transport mechanism is operable to continue streaming of said tape (conducted during write and read data cycle, column 16, lines 58 – 67, column 17, lines 1 – 28).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify Aoki with the above teachings of Langdon. One of ordinary skill would be motivated to make such modification in order to provide an enhanced data compression procedure for storing an increased amount of data onto a recording media (column 1, lines 57 – 60).

9. Aoki as modified by the teachings of Langdon as in claim 23 above, as per claim 24, Langdon teaches a tape drive unit comprising: a tape transport mechanism configured to transport a tape data storage medium past a transducer (column 5, lines 51 – 55); and Aoki teaches a tape speed control element configured to control said tape transport mechanism for transporting said tape at a variable speed; wherein said tape speed is variable according to a data occupancy level of said buffer memory (speed varies according to the data residual amount in the buffer, column 4, lines 7 – 25).

### ***Response to Arguments***

10. Applicant's arguments filed 12/28/2006 have been fully considered but they are not persuasive. The Applicant argues that Aoki is arranged in the opposite manner of the current Application stating that the claim limitations dictate compressing a stream and then storing the compressed stream in an output buffer.

Art Unit: 2182

11. As per the Applicant's argument the Examiner respectfully disagrees. The claims do not require any compression, storing or disabling to be performed. The closest to such limitations is mere capability or operability to perform the limitations the Applicant has argued. The Examiner notes that the features upon which applicant relies (i.e., compressing a stream and storing the compressed stream into a buffer memory) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Assuming arguendo that applicants claims do require in a positive recitation of the data processing device carrying out the argued functionality, the Examiner directs the Applicant to column 5, lines 53 to column 6, line 5, where Aoki states that the compressed data stream is compressed and stored in the second memory means. Clearly from this recitation one of ordinary skill in the art would understand that the compressed stream is stored in the buffered memory.

### **Conclusion**

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent Number 4,423,480 is cited for its transducer combination with a data compression system as applicable to the current application. US Patent Number 5,969,897 is cited as a data recording system on a tape media with varying speed adjustments as applicable to the current application.

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aurangzeb Hassan whose telephone number is (571)272-8625. The examiner can normally be reached on Monday - Friday 9 AM to 5:30 PM.

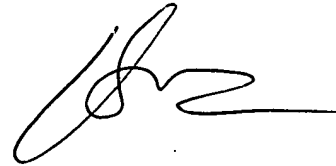
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571)272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2182

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AH



KIM HUYNH  
SUPERVISORY PATENT EXAMINER

3/19/07